

## NOTES

### CHROMOSOME NUMBERS OF MISCELLANEOUS ANGIOSPERMS

Chromosome numbers are reported in Table 1 for 20 collections representing 19 species. First reports are indicated by an asterisk preceding the name. Counts agreeing with those previously reported by other authors are not discussed any further.

#### APONOGETONACEAE

Raven (1975) has suggested a base number of  $x = 8$  for the family. *Aponogeton crispus* is the third chromosomally known species based on this number, whereas the high polyploid *A. natans* has been reported to have the apparently aneuploid numbers  $2n = 76, 78, 92$  (Misra, 1972; Sharma & Chatterjee, 1967).

#### ERIOCAULACEAE

This family remains very poorly known cytologically with only the genus *Eriocaulon* previously known. Raven (1975) suggested a base number  $x = 8$  for *Eriocaulon*, although numbers based on  $x = 9$  and 10 have also been reported for four species (Cave, 1967; Erlandsson, 1942; Hedberg & Hedberg, 1977; Mehra & Sachdeva, 1971). The two current counts for *Syngonanthus* provide further support for a base number  $x = 8$  for the family but also suggest that the family is cytologically diverse and well worth intensive cytological investigation.

#### GESNERIACEAE

All the numbers here reported for species of this family agree with numbers previously reported for the respective genera. However, the report of tetraploidy for *Achimenes erecta* is of interest since polyploidy is rare in the family (Wiehler, 1971) although not previously unknown in the genus.

#### GRAMINEAE

*Ergrostis hypnoides*, previously known from a single diploid count in the tropical portion of its range (Davidse & Pohl, 1972) is now shown to be tetraploid in the temperate portion of its range. This suggests a tropical origin for this species but more extensive sampling is obviously necessary.

#### SOLANACEAE

The chromosome number for the Panamanian endemic *Brunfelsia dwyeri* agrees with that previously reported for five other species and provides further evidence for a base number of  $x = 11$  for the genus (Plowman, 1973).

TABLE 1. Chromosome numbers and voucher information for miscellaneous angiosperms.

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 APONOGETONACEAE

- \* *Aponogeton crispus* Thunb.  $n = 24$ . SRI LANKA: Central Province, Nuwara Eliya District, Horton Plains, *Davidse 7616* (MO).

## BUTOMACEAE

- Limnocharis flava* (L.) Buchn.  $n = 10$ . VENEZUELA: Guárico, ca. 50 km N of San Fernando de Apure, *Davidse, Agostini & Agostini 3820* (MO).

## ERIOCAULACEAE

- \* *Syngonanthus caulescens* (Poir.) Ruhl.  $n = 13$ . VENEZUELA: Guárico, ca. 32 km SSE of Calabozo, *Davidse 3771* (MO).  
 \* *Syngonanthus xeranthemoides* (Bong.) Ruhl.  $n = 16$ . VENEZUELA: Apure, between the Río Cinaruco and the Galeras de Cinaruco, *Davidse & González 12279A* (MO).

## GESNERIACEAE

- \* *Achimenes erecta* (Lam.) H. P. Fuchs.  $n = 22$ . JAMAICA: Portland Parish, Muriel's Rock, between Section and Hardware Gap, *Davidse & Proctor 3244* (MO).  
*Achimenes longiflora* DC.  $n = 11$ . NICARAGUA: Managua, 27 km S of Managua along Hwy. 8, *Davidse & Pohl 2382* (MO).  
*Alloplectus tetragonus* (Oerst.) Hanst.  $n = 9$ . COSTA RICA: Cartago, 2 km E of Muñeco, *Davidse & Pohl 1679* (MO).  
*Columnnea linearis* Oerst.  $2n = 18$ . NICARAGUA: Chontales, 8 km E of Villa Somoza along Hwy. 7, *Davidse 2734* (MO).  
 \* *Corytoplectus congestus* (Lind.) Wiehler.  $n = 9$ . VENEZUELA: Mérida, 66 km NE of Mérida along the Mérida-Azulita Rd., *Davidse 3239* (MO).  
*Gesneria aucaulis* L.  $n = 14$ . JAMAICA: St. Catherine Parish, 2.1 mi SE of Bog Walk, *Davidse 3270* (MO).  
*Kohleria hirsuta* (H.B.K.) Regel.  $n = 13$ . VENEZUELA: Distrito Federal, 7.0 km SW of Carayaca, *Davidse 2893* (MO).  
*Kohleria tubiflora* (Cav.) Hanst.  $n = 13$ . NICARAGUA: Rivas, La Cuesta, 3 km NE of San Juan del Sur, *Davidse & Pohl 2284* (ISC, MO).  
*Kohleria tubiflora* (Cav.) Hanst.  $n = 13$ . VENEZUELA: Barinas, 25 km NW of the Mérida intersection (just outside of Barinas) along road to Mérida, *Davidse 3187* (MO).  
 \* *Rhytidophyllum tomentosum* (L.) Mart. ex G. Don.  $n = 14$ . JAMAICA: St. Thomas Parish, just NW of Cedar Valley along road to Arntully, *Davidse 3262* (MO).  
*Sinningia incarnata* (Aubl.) D. Denh.  $n = 13$ . EL SALVADOR: Libertad, 3 km E of La Libertad along Hwy. 2, *Davidse & Pohl 2056* (MO).

## GRAMINEAE

- \* *Eragrostis hypnoides* (Lam.) B.S.P.  $n = 20$ . UNITED STATES: Missouri, St. Charles Co., ca. 1 mi SW of the bridge at the intersection of U.S. Hwy. 40 and the Missouri River, *Davidse 3553* (ISC, MO).  
*Eragrostis pectinacea* (Michx.) Beauv.  $n = 30$ . UNITED STATES: Missouri, St. Charles Co., ca. 1 mi SW of the bridge at the intersection of U.S. Hwy. 40 and the Missouri River, *Davidse 3554* (ISC, MO).  
*Sporobolus asper* (Michx.) Kunth.  $n = 27$ . UNITED STATES: St. Louis, *Davidse 3671* (MO).

## LAURACEAE

- Cassytha filliformis* L.  $n = 24$ . BELIZE: Belize District,  $\frac{3}{4}$  mi in from Western Hwy. on Ferguson Bank, *Dwyer 12803* (MO).

## SOLANACEAE

- \* *Brunfelsia dwyeri* D'Arcy.  $2n = 22$ . PANAMA: Panamá, Cerro Jefe, *Gentry 4883* (MO).
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\* First report or different count.

## LITERATURE CITED

- CAVE, M. S. 1967. In Documented chromosome numbers of plants. *Madroño* 19: 134–136.  
 DAVIDSE, G. & R. W. POHL. 1972. Chromosome numbers, meiotic behavior, and notes on some grasses from Central America and the West Indies. *Canad. J. Bot.* 50: 1441–1452.

- ERLANDSSON, S. 1942. The chromosome numbers of three *Eriocaulon* species. *Arkiv. Bot.* 30B(1): 1–4.
- HEDBERG, I. & O. HEDBERG. 1977. Chromosome numbers of afroalpine and afromontane angiosperms. *Bot. Not.* 130: 1–24.
- MEHRA, P. N. & S. K. SACHDEVA. 1971. In IOPB chromosome reports XXXIII. *Taxon* 20: 609–614.
- MISRA, M. P. 1972. Cytological studies in some Indian *Potamogeton* and *Aponogeton* species. *Bull. Bot. Soc. Bengal* 26: 47–51.
- PLOWMAN, T. C. 1973. The South American species of *Brunfelsia* (Solanaceae). Ph. D. thesis. Harvard Univ., Cambridge, Massachusetts.
- SHARMA, A. K. & T. CHATTERJEE. 1967. Cytotaxonomy of Helobiae with special reference to the mode of evolution. *Cytologia* 32: 286–307.
- RAVEN, P. H. 1975. The bases of angiosperm phylogeny: cytology. *Ann. Missouri Bot. Gard.* 62: 724–764.
- WIEHLER, H. 1971. Chromosome numbers in some American Gesneriaceae. *Baileya* 18: 118–120.
- Gerrit Davidse, *Missouri Botanical Garden, Post Office Box 299, St. Louis, Missouri 63166.*

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## A NEW SPECIES OF *HERNANDIA* (HERNANDIACEAE) FROM PANAMA

### ***Hernandia hammelii* D'Arcy, spec. nov.**

Arbor 15–20 m alta, ligno leni, virguli crassis, cicatrices petiolorum circulares conspicuas ferenti, ramunculis parum gracilioribus nigris siccantibus; folia ovata vel elliptica, 6–8 cm longa, 2.5–4 cm lata, apice breve acuminate, basim rotundata, glabra, coriacea, costa conspicua, nervis lateralibus irregularibus, arcuatis, 2–5 utrinque supra inconspicuis subtus evidentibus siccantibus, pari basali oppositi, petiolis rectis, gracilis, angulatis siccantibus; flores bracteolis anguste ovatis subtentis. Flores fructusque evoluti non visi.

TYPE: PANAMA. COCLÉ PROVINCE: continental divide on road to Coclesito, 1600 ft, *Hammel 7205* (MO).

*Tree* 15–20 m tall; wood soft, white; young branches with conspicuous circular leaf scars, the twigs drying slightly narrower, dark. *Leaves* ovate or elliptical, 6–8 cm long, 2.5–4 cm wide, apically short acuminate, blunt, basally rounded, glabrous, coriaceous, the costa conspicuous, the lateral nerves irregular, 2–5 on each side, arcuate, ascending, obscure above, drying evident beneath, the basal pair opposite; petioles slender, drying angled, 2–3 cm long. *Inflorescence* cymose, bracteate, mostly covered with minute grayish trichomes, the flowers subtended by small, narrowly ovate, costate, caducous bracteoles. *Flowers* with a basal cupule which completely envelopes the young developing fruit.

This species is singular in its small leaves which somewhat resemble those of *H. cubensis* Griseb. of Cuba, but in that species the leaves are much broader and the petioles much longer and more widely spaced. This is the only species of *Hernandia* known on the American mainland with such small, crowded and uniform-appearing leaves. The bracteoles in this species are much like those in other *hernandias*, but may be sooner caducous. The cupule at the base of the developing fruit appears to envelop the fruit to a much greater degree than in other species. How it is placed in mature fruit is unknown.